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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,564	11/02/2005	Tong-Sok Kim	29926/40687	9152

4743 7590 09/02/2009

MARSHALL, GERSTEIN & BORUN LLP
233 SOUTH WACKER DRIVE
6300 SEARS TOWER
CHICAGO, IL 60606-6357

EXAMINER	
LEE, ANDREW CHUNG CHEUNG	
ART UNIT	**PAPER NUMBER**
2419	

MAIL DATE	DELIVERY MODE
09/02/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/529,564	KIM ET AL.	
	Examiner	Art Unit	
	Andrew C. Lee	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 June 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *20-41* is/are pending in the application.

4a) Of the above claim(s) *1-19* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *20-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Claims 1 – 19 have been cancelled.

Claims 20 – 41 have been newly added and are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 20, 26, 32, 37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Regarding claims 20, 26, 32, 37, the newly modified claim subject matters “a low band processing unit” and “a signal sequence of a low band of a data communication band” were not disclosed and described in the specification at the time the application was initially filed. Clarification and correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 20, 26, 32, 37, 21, 27, 33, 38, 22, 28, 34, 39, 24, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petite et al. (US 6891838 B1) in view of Rippin et al. (US 6741604 B1).

Regarding claims 20, 26, 32, 37, Petite et al. disclose a digital subscriber's network terminal for home automation communication and the digital subscriber's network accessing apparatus *(Fig. 2, Fig. 3, Fig. 5)*, comprising: a home automation service channel module for receiving home automation data from a home automation equipment through a communication channel formed between the home automation equipment and the home automation service channel module *(Fig. 5, col. 17, lines 17 – 54)*; and mapping an output signal of the home automation service channel module to a signal sequence of used by a digital subscriber's network and transferring the mapped signal sequence to a digital subscriber's network access unit *(Fig. 2, Fig. 4C, Fig. 4D, col. 14, lines 18 – 61).*

Petite et al. do not disclose explicitly a low band processing unit and a signal sequence of a low band of a data communication band used by a digital subscriber's network.

Rippin et al. in the same field of endeavor teach a low band processing unit and a signal sequence of a low band of a data communication band used by a digital subscriber's network *(Fig. 1, Fig. 2, col. 6, lines 5 - 25).*

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Petite et al. to include the features of a low band processing unit and a signal sequence of a low band of a data communication band used by a digital subscriber's network as taught by Rippin et al. One of ordinary skill in the art would be motivated to do so for providing methods and apparatus that enable improved exploitation of the spectrum available for ADSL, particularly in the presence of other network services, such as ISDN *(as suggested by Rippin et al., see col. 2, lines 55 – 58).*

Regarding claims 21, 27, 33, 38, Petite et al. disclose the digital subscriber's network terminal and the digital subscriber's network accessing apparatus claimed wherein the home automation service channel module generates a home automation service message based on a message type and an information element for the received home automation data *(Fig. 2, Fig. 5, Fig. 6, Fig.7, Abstract, col. 6, lines 33 – 53).*

Regarding claims 22, 28, 34, 39, Petite et al. disclose the digital subscriber's network terminal and the digital subscriber's network accessing apparatus claimed wherein the home automation service message *(Fig. 6, Fig. 7)* includes a home automation service protocol identifier field, a home automation service reference number field, a message type field including a home automation service content (a request or response), and a home automation service related parameter *(Fig. 6, Fig. 7, col. 18, lines 22 – 66, col. 19, lines 1 – 13).*

Regarding claims 24, 30, Petite et al. disclose the digital subscriber's network terminal and the digital subscriber's network accessing apparatus claimed wherein the home automation service channel module forms a wireless or wired communication

channel with the home automation equipment *("RF transceiver/repeater"; Fig. 2, Fig. 9, Fig. 10, Fig. 11, col. 6, lines 23 – 53, col. 20, lines 29 – 53).*

6. Claims 23, 29, 35, 40, 25, 31, 36, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petite et al. (US 6891838 B1) and Rippin et al. (US 6741604 B1) as applied to claims 20, 21, 22, 26, 27, 28, 32, 33, 34, 37, 38, 39 above, and further in view of Chen et al. (US 7382786 B2).

Regarding claims 23, 29, 35, 40, Petite et al. discloses the digital subscriber's network terminal and the digital subscriber's network accessing apparatus claimed wherein the home automation service related parameter includes user information (*col. 3, lines 14 – 29)* except the user information includes telephone number information linked to the digital subscriber's network terminal.

Chen et al. in the same field of endeavor teach the user information includes telephone number information linked to the digital subscriber's network terminal *("toll free number"; col. 18, lines 7 – 25).*

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Petite et al. to include the features of the user information includes telephone number information linked to the digital subscriber's network terminal as taught by Chen et al. One of ordinary skill in the art would be motivated to do so for providing a broadband communications devices including phone-based home gateway interfaces *(as suggested by Chen et al., see col. 1, lines 19 – 20).*

Regarding claims 25, 31, 36, 41, Petite et al. do not disclose wherein the digital subscriber's network terminal is of any one between a dual link discrete multi-tone (DLDMT) or an asynchronous transfer mode (ATM).

Chen et al. in the same field of endeavor teach wherein the digital subscriber's network terminal is of any one between a dual link discrete multi-tone (DLDMT) or an asynchronous transfer mode (ATM) *("asynchronous transfer mode (ATM)"; col. 15, lines 30 – 43).*

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Petite et al. to include the features of wherein the digital subscriber's network terminal is of any one between a dual link discrete multi-tone (DLDMT) or an asynchronous transfer mode (ATM) as taught by Chen et al. One of ordinary skill in the art would be motivated to do so for providing a broadband communications devices including phone-based home gateway interfaces *(as suggested by Chen et al., see col. 1, lines 19 – 20).*

Response to Arguments

7. Applicant's arguments filed on 6/23/2009 with respect to claims 20 – 41 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Chen et al. (US 7394819 B2).

b. Kim et al. (US 6941364 B2)

c. Bennett III et al. (US 7551071 B2)

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C Lee/
Examiner, Art Unit 2419
<8/24/2009::4Qy09>

/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art Unit 2419